

## Weekly Climate Summary: 3/31/2024-4/6/2024

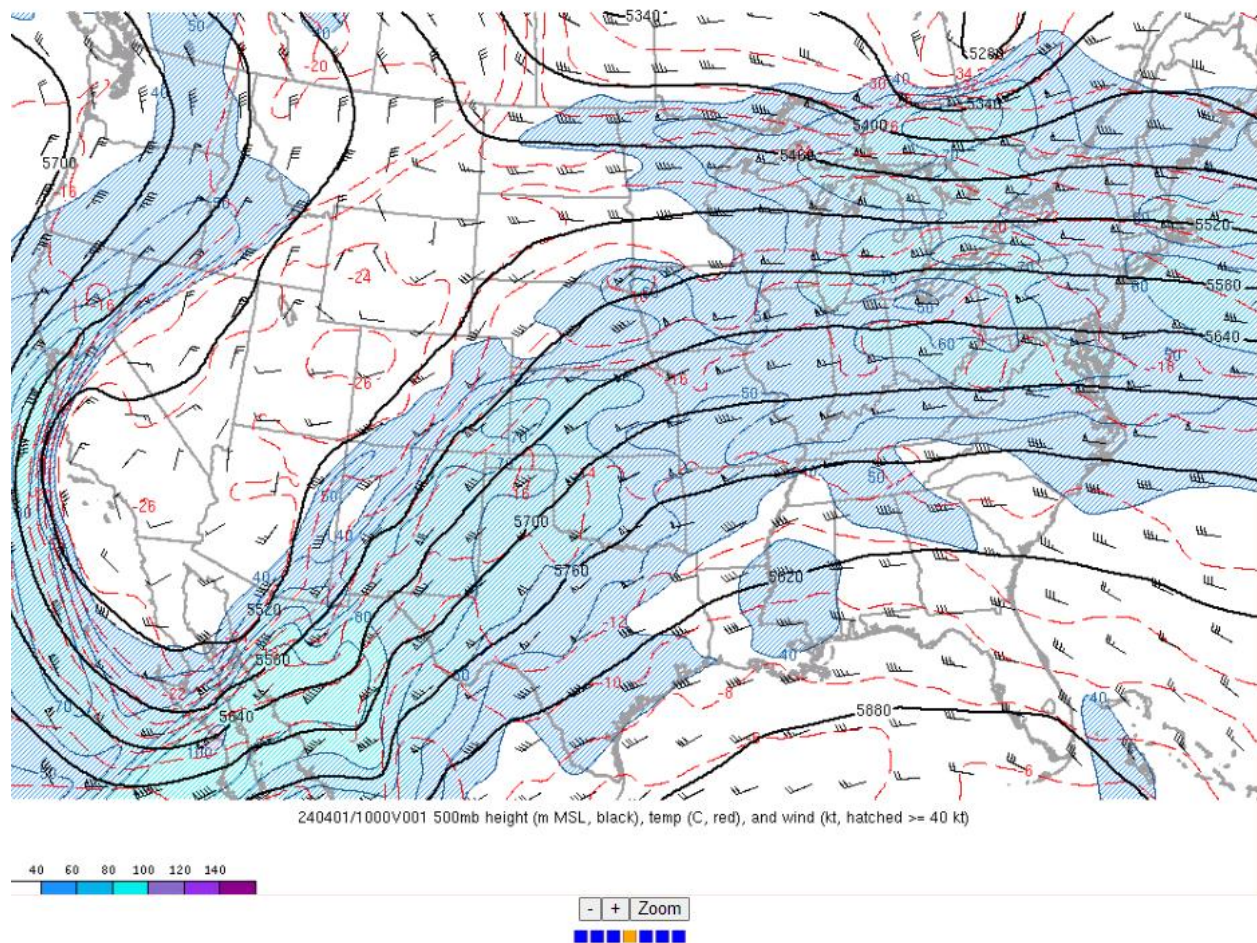
### **Climate in the News:**

The week of March 31 to April 6 cut off right before the eclipse on April 8, 2024, so details regarding that event will be held off until the next weekly report. This week was characterized by a severe weather outbreak as we kicked off April, transitioning into warm, tranquil and calm conditions as a ridge in the upper level pattern took hold. As the week rounded off to an end, a frontal boundary slid to the east across Texas on April 6 and 7. This front would later stall, and recede back as a warm front, throwing a wrench in cloud cover forecasting on the day of the solar eclipse.



*Image of a pergola roof that was blown two houses down in an unspecified area in North Texas after strong, potentially severe thunderstorm winds (gusts  $\geq 58$  mph) blew through. Picture courtesy of DeeDee Gage, obtained from NBC5 DFW.*

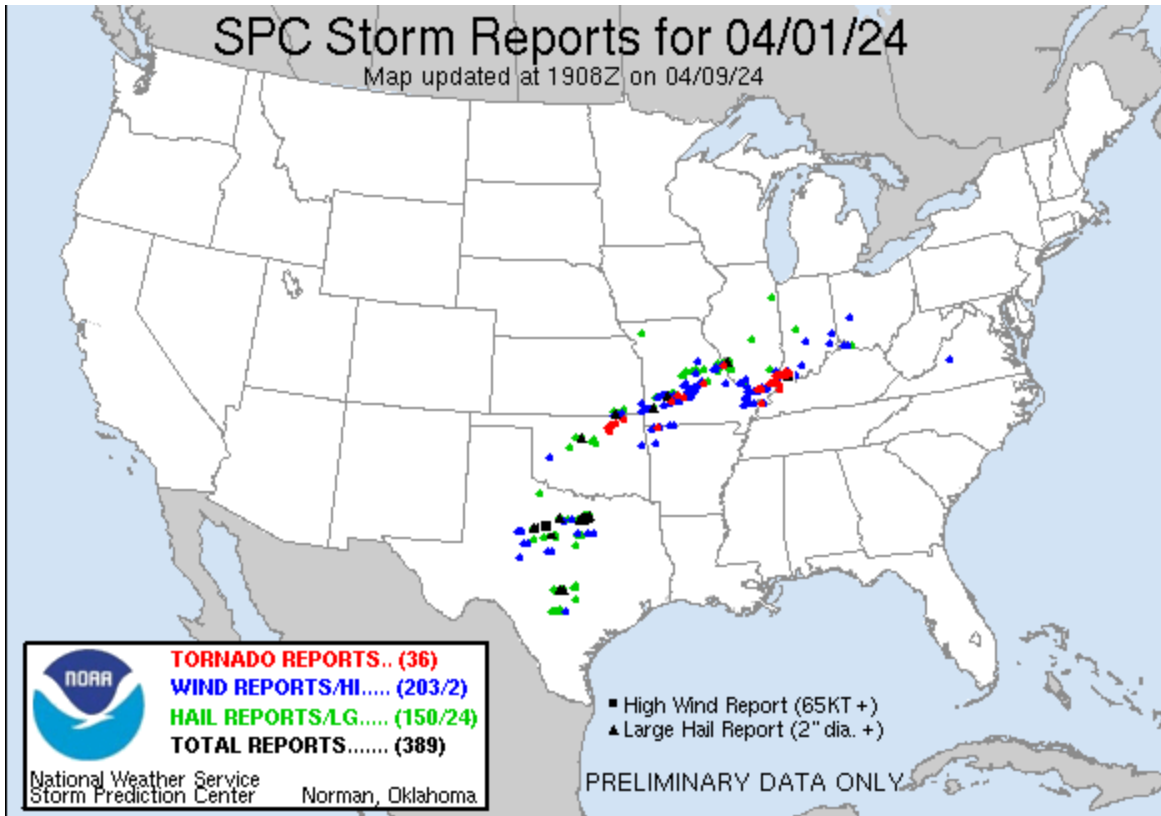
**Weather Synopsis:** As the week entered its second day, a favorable setup for severe weather established itself across Texas. As thunderstorms erupted, numerous severe thunderstorms produced a mixture of wind and hail reports across the State. As the system responsible rumbled through, a more tranquil weather pattern entered the picture to end the week. During the weekend, a powerful low pressure system dragged a cold front through much of the state. Unfortunately, the cold front stalled and later retreated to the north as a warm front as eclipse day approached. This allowed the return of low level moisture, increasing the likelihood of low clouds for the event, potentially ruining the view for millions of individuals who traveled to the path of totality.



*This map shows the upper level pattern in part responsible for the severe weather on April 1. It essentially shows winds and the height of pressure surfaces (which can be thought of as isobars) at about 18,000 feet above the ground. Areas to the east of a trough (large dip in the 'isobars') are typically favored for rising motion, which can aid in creating an environment suitable for thunderstorm development. Courtesy: SPC Mesoanalysis Archive.*

**Severe Weather:** The only day with severe weather reported in Texas, April 1 did so in a very noticeable way as the State saw 83 total severe weather reports. The reports can be categorized as follows

- 67 hail reports with the largest reported hail diameter being **4.50"** in Parker County
- 16 wind reports with the highest reported *measured* gust being **88 mph** in Shackelford County
- 0 tornado reports



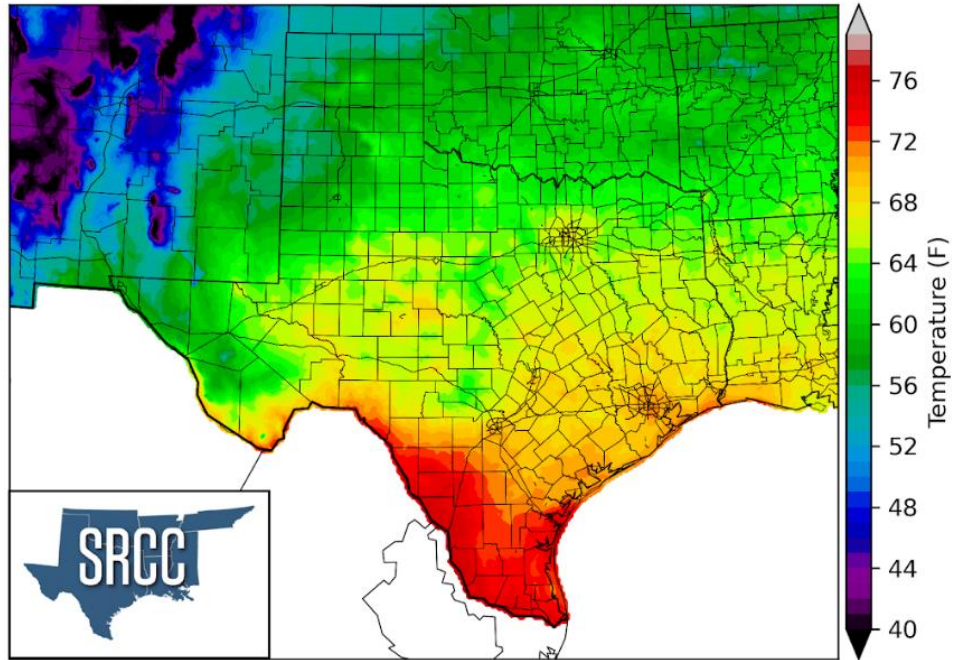
*Map of storm reports from the Storm Prediction Center showing the only day of the week of March 30-April 6 where severe weather was observed across Texas. 83 total reports were received. Reports consisted of mainly hail reports, with 67 total reports, followed by wind with 16 reports. No tornadoes were reported across Texas. Courtesy: Storm Prediction Center.*

**Temperature:**

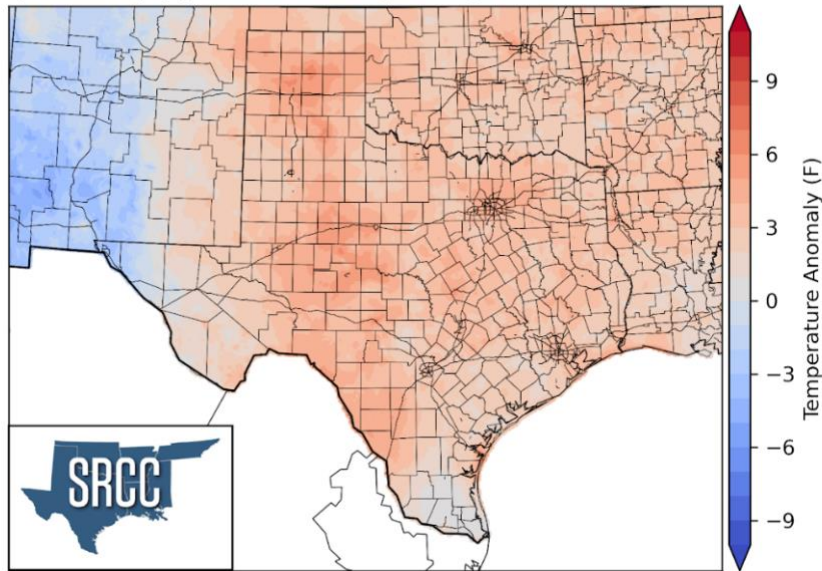
The week was characterized by above normal temperatures across the State. Early in the week, a modest cool-down brought temperatures to near or slightly below climatology, only to warm to significantly above normal by late week. Average weekly temperatures across the state generally ranged from 55°F to 75°F, with the hottest stations above the upper limit. The statewide extremes in average weekly temperature are as follows:

- The Muleshoe 19S Airport station in Bailey County saw the lowest weekly average at 55.9°F
- The Laredo International Airport in Webb County saw the highest weekly average at 77.4°F

Average Temperature (F) March 30th - April 6th, 2024



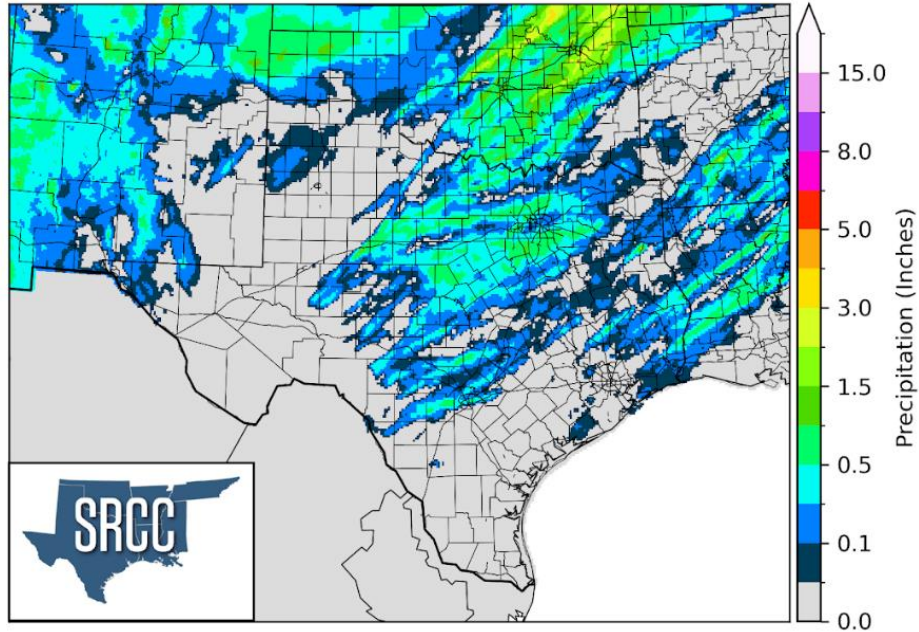
Mean Temp Anomaly (F) March 30th - April 6th, 2024 vs 1991-2020 Normals



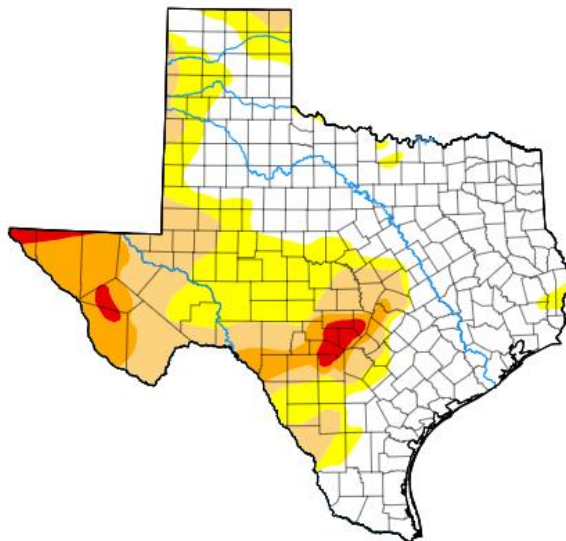
**Precipitation:**

Rainfall across Texas was relatively scant this week, as a significant section of the State’s real estate saw little to no rainfall. Much of what fell was thanks to the same event that brought an extraordinary amount of severe weather. With little rainfall, expectations are not very high that there would be any significant changes to the Texas Drought Monitor.

Accumulated Precipitation (Inches) March 30th - April 6th, 2024



Texas



Map released: Thurs. April 4, 2024

Data valid: April 2, 2024 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

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**Statewide extremes:**

-The hottest recorded temperature of the week was 102°F at the Dimmit County Airport in Dimmit County on April 1, 2024

-The coldest recorded temperature of the week was 27°F seen across three sites, all in Bailey County on April 3, 2024 and April 4, 2024

-The most precipitation recorded in the week of March 30-April 6, 2024 was 1.54" at the Keene 2NNW Co-op site in Johnson County.

-3 stations broke or tied a record high in the week of March 30-April 6, 2024.

-10 stations broke or tied record lows for the same week.